

Abstract

Digital Filter

5 A digital filter for separating Luminance and Chrominance components from a composite video signal includes a digital band pass filter (4) for receiving a digitized modulated signal for passing the frequencies of the digitized modulated signal including the Chrominance component. A sampling circuit (6) receives the filtered
10 signal and passes two consecutive digital samples for each cycle of the carrier signal to provide a sampled signal, which is received and stored in a delay storage element (8). An interpolation circuit (10) receives the stored block of the sampled signal and interpolates the sampled signal to produce a reconstructed signal, which is passed to
15 a processing circuit (12). The processing circuit (12) processes the digitized modulated signal and the reconstructed signal according to a predetermined algorithm so as to separately provide the Luminance and Chrominance components.

20 FIG. 1